

## INTRAMEDULLARY NAIL

### ABSTRACT

The invention relates to an intramedullary nail. More specifically, the invention relates to a structure which combines a tubular nail (1-2-3-2'), a probe (4) which can move axially inside the tubular nail and a bone-fixing support (6), such as to form a head (1) on said nail, from which a plurality of thin rods (2) extend integrally. The rods are distributed over a considerably-long imaginary cylindrical surface having a reduced diameter and meet at a node A(3), beyond which they extend into segments (2')j having an independent free end. According to the invention, a projecting part (5) of the probe (4) acts on the aforementioned segments (2') when the probe is moved towards the head (1), in order to produce the radial deformation of the rods (2') such as to enable same to penetrate the spongy bone tissue. When the protrusion (5) reaches the node (3) of the nail, said node (3) moves towards the head (1), thereby causing the radial expansion of the above-mentioned segment (2) of the rods. In this way, the rods adapt to the inner wall of the bone, exerting an elastic tension for improved fixing, said fixing necessitating only the screws that are used to stabilise the support (6) to which the head (1) of the nail is subsequently fixed internally.